

Title (en)  
Digital phase shifter.

Title (de)  
Digitaler Phasenschieber.

Title (fr)  
Déphaseur numérique.

Publication  
**EP 0235791 A2 19870909 (EN)**

Application  
**EP 87102957 A 19870302**

Priority  
US 83568886 A 19860303

Abstract (en)  
A digital phase shifter uses a heterodyne concept to mix a continuous wave (cw) signal with a local oscillator [VCXO] which is an integer multiple of the difference frequency. The difference frequency is phase-locked, and the local oscillator frequency is divided into N increments by a counter. The count of the counter is compared to a microprocessor generated phase shift value which is added to the difference frequency. The phase shifted difference frequency is then converted up to produce the phase shifted continuous wave signal [F<sub>sc</sub>(out)].

IPC 1-7  
**H03H 17/08**

IPC 8 full level  
**H03H 7/20** (2006.01); **H03C 3/00** (2006.01); **H03H 11/20** (2006.01); **H03H 17/08** (2006.01)

CPC (source: EP US)  
**H03H 17/08** (2013.01 - EP US)

Cited by  
DE3836396C1; GB2228638A; EP0620649A3; US5481207A

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**US 4677395 A 19870630**; CA 1260077 A 19890926; DE 3774149 D1 19911205; DK 106887 A 19870904; DK 106887 D0 19870302; EP 0235791 A2 19870909; EP 0235791 A3 19890315; EP 0235791 B1 19911030; JP H0748638 B2 19950524; JP S62207012 A 19870911

DOCDB simple family (application)  
**US 83568886 A 19860303**; CA 528284 A 19870127; DE 3774149 T 19870302; DK 106887 A 19870302; EP 87102957 A 19870302; JP 4124687 A 19870224